ABSTRACT

An intensified solid-state imaging sensor includes a photo cathode for converting light from an image into electrons, an electron multiplying device for receiving electrons from the photo cathode, and a solid-state image sensor including a plurality of pixels for receiving the electrons from the electron multiplying device through a plurality of channels of the electron multiplying device. The solid-state image sensor generates an intensified image signal from the electrons received from the electron multiplying device. The plurality of channels are arranged in a plurality of channel patterns, and the plurality of pixels are arranged in a plurality of pixel patterns. Each of the plurality of channel patterns is mapped to a respective one of the plurality of pixel patterns such that electron signals from each of the plurality of channel patterns is substantially received by the single respective one of the plurality of pixel patterns.

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